# Costas Emmanuel Synolakis

List of Publications by Year
in descending order



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|---|---|---|---|
| 127 papers | 8,030 citations | 50276 46 h-index | 49909 87 g-index |
| 127 all docs | 127 docs citations | 127 times ranked | 3404 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Field survey of the 30 October 2020 Samos (Aegean Sea) tsunami in the Greek islands. Bulletin of Earthquake Engineering, 2022, 20, 7873-7905. | 4.1 | 12 |
| 2 | Palaeo-Tsunami Events on the Coasts of Cyprus. Geosciences (Switzerland), 2022, 12, 58. | 2.2 | 4 |
| 3 | The Mw = 6.6 earthquake and tsunami of south Crete on 2020 May 2. Geophysical Journal International, 2022, 230, 480-506. | 2.4 | 6 |
| 4 | Anatomy of strike-slip fault tsunami genesis. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, . | 7.1 | 29 |
| 5 | Wave overtopping due to harbour resonance. Coastal Engineering, 2021, 169, 103973. | 4.0 | 9 |
| 6 | Coastal Boulders on the SE Coasts of Cyprus as Evidence of Palaeo-Tsunami Events. Journal of Marine Science and Engineering, 2020, 8, 812. | 2.6 | 10 |
| 7 | Field Survey and Numerical Modelling of the December 22, 2018 Anak Krakatau Tsunami. Pure and Applied Geophysics, 2020, 177, 2457-2475. | 1.9 | 31 |
| 8 | The Chios, Greece Earthquake of 23 July 1949: Seismological Reassessment and Tsunami Investigations. Pure and Applied Geophysics, 2020, 177, 1295-1313. | 1.9 | 8 |
| 9 | Temporal and Topographic Source Effects on Tsunami Generation. Journal of Geophysical Research: Oceans, 2019, 124, 5270-5288. | 2.6 | 8 |
| 10 | The 20th July 2017 Bodrumâ€“Kos Tsunami Field Survey. Pure and Applied Geophysics, 2019, 176, 2925-2949. | 1.9 | 28 |
| 11 | Numerical modeling of tsunamis and tsunami vulnerability analysis for Heraklion, Crete. Mathematical Methods in the Applied Sciences, 2018, 41, 1068-1073. | 2.3 | 2 |
| 12 | Temporal and Spatial Evolution of Potential Energy, Kinetic Energy, and Momentum Flux in Tsunami Waves during Breaking and Inundation. Journal of Waterway, Port, Coastal and Ocean Engineering, 2017, 143, 04017018. | 1.2 | 2 |
| 13 | Twenty Challenges in Incident Planning. Journal of Homeland Security and Emergency Management, 2017, 14, . | 0.5 | 3 |
| 14 | Development of MOST for Real-Time Tsunami Forecasting. Journal of Waterway, Port, Coastal and Ocean Engineering, 2016, 142, . | 1.2 | 58 |
| 15 | Lagrangian flow measurements and observations of the 2015 Chilean tsunami in Ventura, CA. Geophysical Research Letters, 2016, 43, 5217-5224. | 4.0 | 12 |
| 16 | Sequencing of tsunami waves: why the first wave is not always the largest. Geophysical Journal International, 2016, 204, 719-735. | 2.4 | 27 |
| 17 | Tsunamis: bridging science, engineering and society. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2015, 373, 20140369. | 3.4 | 47 |
| 18 | A STUDY OF WAVE AMPLIFICATION IN THE VENETIAN HARBOR OF CHANIA, CRETE. Coastal Engineering Proceedings, 2015, 1, 59. | 0.1 | 3 |

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| 19 | The Fukushima accident was preventable. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2015, 373, 20140379. | 3.4 | 46 |
| 20 | Tsunami Dynamics, Forecasting, and Mitigation. , 2015, , 15-57. | | 6 |
| 21 | Tsunami Generation Above a Sill. Pure and Applied Geophysics, 2015, 172, 985-1002. | 1.9 | 6 |
| 22 | Late Holocene uplift of Rhodes, Greece: evidence for a large tsunamigenic earthquake and the implications for the tectonics of the eastern Hellenic Trench System. Geophysical Journal International, 2015, 203, 459-474. | 2.4 | 16 |
| 23 | Palaeotsunamis and tsunami hazards in the Eastern Mediterranean. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2015, 373, 20140374. | 3.4 | 28 |
| 24 | Plausible megathrust tsunamis in the eastern Mediterranean Sea. Proceedings of the Institution of Civil Engineers: Engineering and Computational Mechanics, 2014, 167, 99-105. | 0.4 | 8 |
| 25 | Application of a finite difference computational model to the simulation of earthquake generated tsunamis. Applied Numerical Mathematics, 2013, 67, 111-125. | 2.1 | 22 |
| 26 | Focusing of long waves with finite crest over constant depth. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2013, 469, 20130015. | 2.1 | 26 |
| 27 | Heavy Metal Distribution in Opportunistic Beach Nourishment: A Case Study in Greece. Scientific World Journal, The, 2013, 2013, 1-5. | 2.1 | 13 |
| 28 | The 2011 Japan tsunami current velocity measurements from survivor videos at Kesennuma Bay using LiDAR. Geophysical Research Letters, 2012, 39, . | 4.0 | 199 |
| 29 | The 2010 M<sub>w</sub> 7.8 Mentawai earthquake: Very shallow source of a rare tsunami earthquake determined from tsunami field survey and nearâ€field GPS data. Journal of Geophysical Research, 2012, 117, . | 3.3 | 130 |
| 30 | Coastal Resilience: Can We Get Beyond Planning the Last Disaster?. , 2011, , . | | 10 |
| 31 | Observations and Modeling of the 27 February 2010 Tsunami in Chile. , 2011, , . | | 0 |
| 32 | The Great Cretan Splash Up-A Coastal Disaster Preparedness Exercise in Greece. , 2011, , . | | 3 |
| 33 | Insights on the 2009 South Pacific tsunami in Samoa and Tonga from field surveys and numerical simulations. Earth-Science Reviews, 2011, 107, 66-75. | 9.1 | 64 |
| 34 | Reassessing the tsunami risk in major ports and harbors of California I: San Diego. Natural Hazards, 2011, 58, 479-496. | 3.4 | 12 |
| 35 | Tsunami Simulations for Regional Sources in the South China and Adjoining Seas. Pure and Applied Geophysics, 2011, 168, 1153-1173. | 1.9 | 58 |
| 36 | Sedimentary Deposits from the 17 July 2006 Western Java Tsunami, Indonesia: Use of Grain Size Analyses to Assess Tsunami Flow Depth, Speed, and Traction Carpet Characteristics. Pure and Applied Geophysics, 2011, 168, 1951-1961. | 1.9 | 67 |

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| 37 | Field Survey of the 27 February 2010 Chile Tsunami. Pure and Applied Geophysics, 2011, 168, 1989-2010. | 1.9 | 266 |
| 38 | A New Tool for Inundation Modeling: Community Modeling Interface for Tsunamis (ComMIT). Pure and Applied Geophysics, 2011, 168, 2121-2131. | 1.9 | 70 |
| 39 | A Second Generation of Tsunami Inundation Maps for the State of California. Pure and Applied Geophysics, 2011, 168, 2133-2146. | 1.9 | 15 |
| 40 | A review of coastal community vulnerabilities toward resilience benefits from disaster reduction measures. Environmental Hazards, 2010, 9, 222-232. | 2.5 | 12 |
| 41 | Tsunami Catalogs for the Eastern Mediterranean, Revisited. Journal of Earthquake Engineering, 2010, 14, 309-330. | 2.5 | 75 |
| 42 | The 1956 earthquake and tsunami in Amorgos, Greece. Geophysical Journal International, 2009, 178, 1533-1554. | 2.4 | 112 |
| 43 | Choking on carbon emissions from Greek academic paperwork. Nature, 2009, 461, 167-167. | 27.8 | 3 |
| 44 | New Maps of California to Improve Tsunami Preparedness. Eos, 2009, 90, 137-138. | 0.1 | 7 |
| 45 | TSUNAMI HYDRODYNAMIC MODELING: STANDARDS AND GUIDELINES. , 2009, , 127-145. | | 1 |
| 46 | THE ROLE OF REGIONAL SEDIMENT MANAGEMENT IN COASTAL ZONE MANAGEMENT. , 2009, , . | | 1 |
| 47 | Evaluating Tsunami Hazard in the Northwestern Indian Ocean. Pure and Applied Geophysics, 2008, 165, 2045-2058. | 1.9 | 39 |
| 48 | Far-field tsunami hazard from mega-thrust earthquakes in the Indian Ocean. Geophysical Journal International, 2008, 172, 995-1015. | 2.4 | 157 |
| 49 | Geoarchaeological tsunami deposits at Palaikastro (Crete) and the Late Minoan IA eruption of Santorini. Journal of Archaeological Science, 2008, 35, 191-212. | 2.4 | 171 |
| 50 | Tsunami Inundation from Great Earthquakes on the Cascadia Subduction Zone along the Northern California Coast. , 2008, , . | | 0 |
| 51 | BENCHMARK PROBLEMS. Series on Quality, Reliability and Engineering Statistics, 2008, , 223-230. | 0.2 | 5 |
| 52 | AMPLITUDE EVOLUTION AND RUNUP OF LONG WAVES: COMPARISON OF EXPERIMENTAL AND NUMERICAL DATA ON A 3D COMPLEX TOPOGRAPHY. Series on Quality, Reliability and Engineering Statistics, 2008, , 243-247. | 0.2 | 4 |
| 53 | The Plight of the Beaches of Crete. , 2008, , . | | 4 |
| 54 | Evaluating Tsunami Hazard in the Northwestern Indian Ocean. , 2008, , 2045-2058. | | 1 |

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| 55 | Extreme runup from the 17 July 2006 Java tsunami. Geophysical Research Letters, 2007, 34, . | 4.0 | 120 |
| 56 | Tsunami inundation at Crescent City, California generated by earthquakes along the Cascadia Subduction Zone. Geophysical Research Letters, 2007, 34, . | 4.0 | 29 |
| 57 | Earthquake-Induced Liquefaction around Marine Structures. Journal of Waterway, Port, Coastal and Ocean Engineering, 2007, 133, 55-82. | 1.2 | 55 |
| 58 | MODELING FAR-FIELD TSUNAMIS FOR CALIFORNIA PORTS AND HARBORS. , 2007, , . | | 0 |
| 59 | 2004 Indian Ocean tsunami flow velocity measurements from survivor videos. Geophysical Research Letters, 2006, 33, . | 4.0 | 134 |
| 60 | Northern Sumatra Field Survey after the December 2004 Great Sumatra Earthquake and Indian Ocean Tsunami. Earthquake Spectra, 2006, 22, 93-104. | 3.1 | 49 |
| 61 | Oman Field Survey after the December 2004 Indian Ocean Tsunami. Earthquake Spectra, 2006, 22, 203-218. | 3.1 | 85 |
| 62 | Sri Lanka Field Survey after the December 2004 Indian Ocean Tsunami. Earthquake Spectra, 2006, 22, 155-172. | 3.1 | 71 |
| 63 | Maldives Field Survey after the December 2004 Indian Ocean Tsunami. Earthquake Spectra, 2006, 22, 137-154. | 3.1 | 41 |
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| 66 | Runup Measurements of the December 2004 Indian Ocean Tsunami. Earthquake Spectra, 2006, 22, 67-91. | 3.1 | 75 |
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| 68 | Initial Value Problem Solution of Nonlinear Shallow Water-Wave Equations. Physical Review Letters, 2006, 97, 148501. | 7.8 | 83 |
| 69 | GENERATION AND PROPAGATION OF TSUNAMIS TRIGGERED BY EARTHQUAKES AND LANDSLIDES: A THEORETICAL AND A SIMULATION VIEWPOINT. , 2006, , . | | 0 |
| 70 | Could it Happen Here?. Civil Engineering, 2005, 75, 54-133. | 0.1 | 17 |
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| 73 | Runup and rundown generated by three-dimensional sliding masses. Journal of Fluid Mechanics, 2005, 536, 107-144. | 3.4 | 225 |
| 74 | COASTAL HAZARD PREVENTION AND RESPONSE EVALUATION. , 2005, , . | | 1 |
| 75 | The Regional Economic Cost of a Tsunami Wave Generated by a Submarine Landslide Off of Palos Verdes, California. , 2005, , 65-94. | | 0 |
| 76 | The earthquake and tsunami of 1865 November 17: evidence for far-field tsunami hazard from Tonga. Geophysical Journal International, 2004, 157, 164-174. | 2.4 | 29 |
| 77 | Source discriminants for near-field tsunamis. Geophysical Journal International, 2004, 158, 899-912. | 2.4 | 188 |
| 78 | Tsunami sources in the southern California bight. Geophysical Research Letters, 2004, 31, n/a-n/a. | 4.0 | 30 |
| 79 | Tsunami Hazards Associated with the Catalina Fault in Southern California. Earthquake Spectra, 2004, 20, 917-950. | 3.1 | 26 |
| 80 | Field Survey and Numerical Simulations: A Review of the 1998 Papua New Guinea Tsunami. Pure and Applied Geophysics, 2003, 160, 2119-2146. | 1.9 | 83 |
| 81 | A Theoretical Comparison of Tsunamis from Dislocations and Landslides. Pure and Applied Geophysics, 2003, 160, 2177-2188. | 1.9 | 86 |
| 82 | Analytical solutions for forced long waves on a sloping beach. Journal of Fluid Mechanics, 2003, 478, 101-109. | 3.4 | 84 |
| 83 | Field Survey and Numerical Simulations: A Review of the 1998 Papua New Guinea Tsunami. , 2003, , 2119-2146. | | 9 |
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| 94 | Geologie Setting, Field Survey and Modeling of the Chimbote, Northern Peru, Tsunami of 21 February 1996. , 1999, , 513-540. | | 1 |
| 95 | Numerical Modeling of Tidal Wave Runup. Journal of Waterway, Port, Coastal and Ocean Engineering, 1998, 124, 157-171. | 1.2 | 396 |
| 96 | Long wave runup on piecewise linear topographies. Journal of Fluid Mechanics, 1998, 374, 1-28. | 3.4 | 155 |
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| 98 | Field survey of Mexican tsunami produces new data, unusual photos. Eos, 1997, 78, 85. | 0.1 | 44 |
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| 101 | Long Wave Runup on Coastal Structures. , 1997, , . | | 0 |
| 102 | Model for the Leading Waves of Tsunamis. Physical Review Letters, 1996, 77, 2141-2144. | 7.8 | 156 |
| 103 | Laboratory experiments of tsunami runup on a circular island. Pure and Applied Geophysics, 1995, 144, 569-593. | 1.9 | 205 |
| 104 | Field survey of the East Java earthquake and tsunami of June 3, 1994. Pure and Applied Geophysics, 1995, 144, 839-854. | 1.9 | 67 |
| 105 | Field survey of the 1994 Mindoro Island, Philippines tsunami. Pure and Applied Geophysics, 1995, 144, 875-890. | 1.9 | 45 |
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| 111 | Roots of $J_gamma (z)pm iJ_{gamma +1}(z)=0$ and the evaluation of integrals with cylindrical function kernels. Quarterly of Applied Mathematics, 1994, 52, 103-112. | 0.7 | 5 |
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| 115 | Report on the International Workshop on Long-Wave Run-up. Journal of Fluid Mechanics, 1991, 229, 675. | 3.4 | 104 |
| 116 | Greenâ€™s law and the evolution of solitary waves. Physics of Fluids A, Fluid Dynamics, 1991, 3, 490-491. | 1.6 | 56 |
| 117 | Tsunami runup on steep slopes: How good linear theory really is. Natural Hazards, 1991, 4, 221-234. | 3.4 | 81 |
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| 120 | On the Maximum Runup of Cnoidal Waves.. , 1989, , 553. | | 0 |
| 121 | Are Solitary Waves the Limiting Waves in Long Wave Runup?. , 1989, , 219. | | 1 |
| 122 | Discussion of â€œ Wave Reflection and Runâ€Up on Rough Slopes â€•by Nobuhisa Kobayashi, Ashwini K. Otta, and Indarajut Roy (May, 1987, Vol. 113, No. 4). Journal of Waterway, Port, Coastal and Ocean Engineering, 1989, 115, 139-143. | 1.2 | 6 |
| 123 | Determining Hydrodynamic Force on Accelerating Plate in Fluid with Free Surface. Journal of Engineering Mechanics - ASCE, 1989, 115, 2480-2492. | 2.9 | 4 |
| 124 | On combining the Bernoulli and Poiseuille equationâ€”A plea to authors of college physics texts. American Journal of Physics, 1989, 57, 1013-1019. | 0.7 | 32 |
| 125 | The anomalous behavior of the runup of cnoidal waves. Physics of Fluids, 1988, 31, 3-5. | 1.4 | 41 |
| 126 | On the roots of $f(z)=J_0(z)-iJ_1(z)$. Quarterly of Applied Mathematics, 1988, 46, 105-107. | 0.7 | 26 |

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| 127 | The runup of solitary waves. Journal of Fluid Mechanics, 1987, 185, 523-545. | 3.4 | 775 |